

What is claimed is:

1. A noise cancel circuit for removing noise components in a detected radio signal, comprising:

5 an interpolation circuit for performing interpolation processing on said detected radio signal, wherein

during generation of a pulse noise, a noise portion of said detected radio signal is interpolated by an output signal from said interpolation circuit.

10 2. The noise cancel circuit defined in Claim 1, wherein said interpolation circuit executes spline interpolation.

3. The noise cancel circuit defined in Claim 1, further comprising:

15 a noise detection circuit for detecting the noise portion of said detected radio signal, wherein

the noise portion of said detected radio signal is interpolated by said interpolation circuit according to an output
20 signal from said noise detection circuit.

4. The noise cancel circuit defined in Claim 3, further comprising:

25 a selection circuit for selecting either the output signal from said interpolation circuit or said detected radio signal, wherein

said selection circuit is controlled according to the output signal from said noise detection circuit.

5. The noise cancel circuit defined in Claim 4, wherein
said interpolation circuit performs interpolation
processing and outputs an interpolation signal regardless of
presence or absence of noise components.

6. The noise cancel circuit defined in Claim 5, further
comprising:

a first delay circuit for delaying said detected radio signal
and supplying the delayed signal to said selection circuit; and

a second delay circuit for delaying said interpolation signal
from said interpolation circuit.

7. The noise cancel circuit defined in Claim 6, wherein
said second delay circuit is disposed in a processing stage
prior to said interpolation circuit.

8. The noise cancel circuit defined in Claim 6, wherein
a delay time of said first delay circuit corresponds to a
sum of an interpolation processing time of said interpolation
circuit and a delay time of said second delay circuit.

9. The noise cancel circuit defined in Claim 8, wherein
the delay time of said second delay circuit corresponds to
a difference obtained by subtracting the interpolation processing
time of said interpolation circuit from a time delay between
generation and detection of said pulse noise.